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Monthly Statistical Report

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MAY 1992

SUMMARY

May's data suggest that the underlying recovery in consumption in recent months continues to be small. Prior to May, year-to-year gains averaging over 3 percent for the first four months, according to the latest estimates, had been implying moderately healthy demand growth. But this had been largely because of even weaker deliveries a year ago; with May's figures, the modestness of any underlying growth became more evident, with deliveries showing only a 1.4 percent year-to-year gain. Compared with two years ago, May's deliveries were still off by 3.5 percent.

For gasoline deliveries, the year-to-year gains of prior months were actually reversed in May. Through April, year-to-date deliveries growth averaging about 2.7 percent had been suggesting unusual strength—at least for a fuel which had averaged a decline of 0.7 percent per year for the prior three years. That strength turned out to be more apparent than real, however, and May's deliveries fell more than 1 percent, year to year. Underlying consumption, however, is still estimated to be growing, but only marginally.

Distillate deliveries, however, continued their strong year-to-year gains, jumping over 5 percent in response to a pickup in truck traffic and unusually cool weather in some regions. For kerosine jet fuel, as well, May's deliveries were up 4.1 percent, roughly in line with growth in commercial air traffic. Residual fuel oil deliveries were off nearly 4 percent.

Meanwhile, domestic crude oil production, falling 3.9 percent or nearly 300 thousand B/D in May, reached its lowest level in more than thirty years. Two-thirds of the year-to-year drop was due to an 11 percent falloff in Alaskan production related in part to scheduled maintenance and other factors. Lower 48 production also declined by about 90 thousand B/D from a year ago.

The decline in domestic supplies, along with marginal increases in demand, imply continued growth in the need for imports. Thus, despite a 7 percent, year-to-year decline in petroleum imports for May and a year-to-date increase of only 2.5 percent, we estimate that, for the first five months of 1992, underlying imports requirements rose close to half a million B/D or about 6 percent. Differences in inventory behavior between this year and last allowed the actual increase in imports to be less than what would have been needed otherwise.

Strength in refinery activity continued in May, with input slightly surpassing year-ago levels. Reflecting, at least directionally, the month's pattern for deliveries, output of gasoline fell by nearly one percent from a year ago while production of other light products rose. Gasoline and distillate inventories remained below average at month-end, however, and stock levels overall reflected an apparent conservatism with respect to holding inventories beyond current needs.

PRODUCT SUPPLIED[1/]

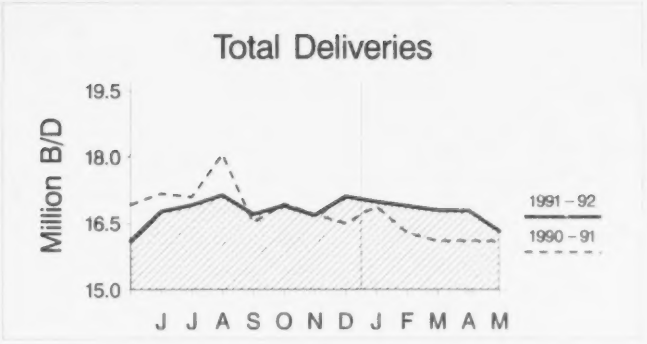
Gasoline

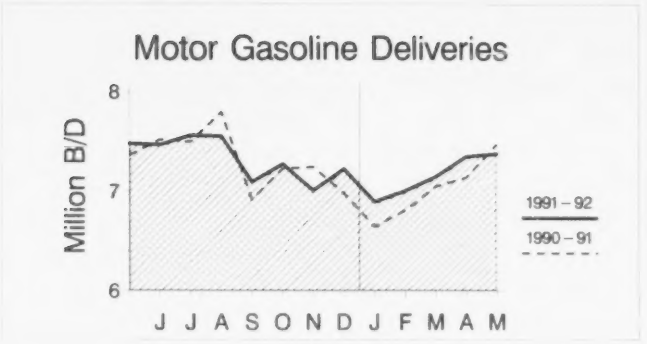
PREVIOUS INCREASES REVERSED IN MAY. Through April, gasoline deliveries had been showing year-to-year gains averaging nearly 3 percent—and this for a fuel that has mustered at best declines of 0.1 to 1.3 percent in the past three years. As we stated previously, the gains in the first quarter were overstating the strength in underlying demand. This was borne out in May's deliveries, which dropped 1.3 percent from a year ago. Looking beyond the fluctuations from one month to the next in observed deliveries, we estimate that the trend in underlying consumption over the past several quarters, if put on an annualized basis, would still be positive but not likely more than 1 percent.

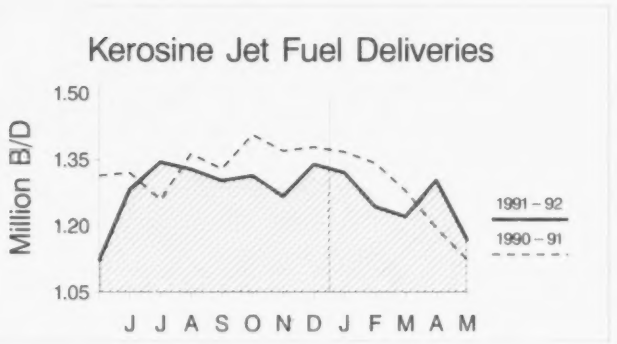
The most recent data on miles traveled have also been falling more into line with the underlying trend we have been estimating. Following unusually strong year-to-year increases of 4 to 5 percent in the first two months of the year, perhaps partly due to unusually warm weather and favorable driving conditions, travel for March rose only 2.6 percent and was essentially in line with what would have been expected based on the trend prior to the winter's unusually large increases. Coupled with continued improvement in overall fleet efficiency of 1 to 2 percent, this is consistent with our estimated trend for consumption.

Retail prices averaged 5 cents higher in May than in April, bringing the increase since March to around 8 cents—about the same size as the decline during the four months prior to that. In addition to typical seasonal patterns, the recent rise coincided with increased crude oil costs averaging roughly 5 cents higher during May than in March and higher manufacturing costs for gasoline

	API ESTIMATES MAY		YEAR-TO-DATE	
	Million B/D	Percent Change	Million B/D	Percent Change
Total domestic deliveries	16.3	1.4	16.7	2.8
Crude production[2/]	7.1	(3.9)	7.2	(2.7)
Total imports[3/]	7.9	(7.0)	7.5	2.5
Stocks (million bbl)[3/]	1,032	(2.6)	na	na







meeting recently-tightened, government-mandated summer requirements for vapor pressure. Even so, retail prices still averaged about 3 cents lower than May a year ago.

Distillates

TRANSPORT DEMAND AND WEATHER BOLSTER DELIVERIES. Growing transportation diesel demand continued to contribute to distillate's recovery during May. However, given the month's unseasonably cool weather (and the resulting impact on heating fuel consumption), the 5.3 percent year-to-year increase in distillate deliveries was slightly below what consumption indicators would have suggested.

As was the case in April, weather during May was considerably chillier than a year ago. The number of heating degree days essentially doubled in the New England and Mid-Atlantic states, and was up over 40 percent for the nation as a whole. Granted, even with the cooler weather, heating fuel consumption during the month was likely only about one-fifth its level during January. Still, on a year-to-year basis, the cooler weather contributed to perhaps a 60-80 thousand B/D increase in heating fuel consumption.

As economic activity picks up, transportation distillate demand tends to pick up as well. There is evidence that this was the case during May. Growth in trucking traffic is estimated to have contributed to about a 100 thousand B/D year-to-year increase in highway diesel use, while the 6-7 percent reported increase in rail ton-miles would suggest perhaps a 10-15 thousand B/D increase in underlying consumption in that sector.

Kerosine Jet Fuel

DELIVERIES AND TRAFFIC APPARENTLY RECOVERING. Deliveries of jet kerosine rose, year to year, during May. At 4.1 percent, the growth was comparable to the growth seen in miles flown by commercial airlines. While jet fuel supplied fell in May from the pace set in April, it continued to surpass, on a seasonally-adjusted basis, the levels seen during the first quarter of 1992 and throughout much of 1991. The recent growth, coupled with the surge in airline ticket sales resulting from steep fare discounts offered on travel this summer, tend to support the belief that the recovery in air traffic (and thus jet fuel demand) is continuing.

Depressed air travel in the months following the start of the Gulf War distorts year-to-year comparisons of miles flown. Still, air travel did begin to recover in May a year ago, and with year-to-year growth in miles flown estimated at 4-5 percent for this May, this would bring air traffic to an all-time high for the month.

Many major U.S. airlines slashed their cheapest fares during May by an additional 50 percent for travel this summer. By all accounts, these fare reductions stimulated a dramatic increase in ticket sales, particularly for non-business travel. While there was little or no impact on air travel in May, the fare discounts likely provided further stimulus to a market already showing signs of growth.

Through the first five months of 1992, jet fuel deliveries have been off nearly 1 percent from a year ago, while miles flown have been up about 6 percent. The contrast is noteworthy in that historically, the two growth rates have more closely parallelled each

other. Growth in the fleet's fuel economy is thought to explain, at best, 1-2 percentage points of the gap. It appears that differentials between growth in international versus domestic travel are a more dominant factor. In the year-ago period, the war-related decline in air travel was considerably sharper for international than for domestic flights. This year, the opposite has been true; international miles flown have been up in excess of 20 percent and domestic travel up only 1-2 percent. With some legs of international flights fueled overseas, the observed differences in international versus domestic air traffic growth would tend to make U.S. deliveries decline more than (or increase less than) total miles flown.

Residual Fuel Oil

DELIVERIES SLIP BELOW 1 MILLION B/D.

Contrasting with the 5 percent growth seen during the first third of the year, deliveries of heavy fuel oil declined 3.8 percent, year to year, in May. At 972 thousand B/D, deliveries fell below the million B/D mark for only the third time in the last 45 years. Unseasonably cool weather in the East was a major factor in resid's weakness, cutting into electricity demand from last year's levels. Increasing price competitiveness vis-a-vis natural gas is believed to have kept these declines from being greater.

May has historically been the year's weakest month in terms of resid supplied. This weakness results both from the overall drop in power demand during the month and from seasonal fuel switching from heavy oil to natural gas by utility and industrial consumers. While cool weather this May (and the resulting late-season call on natural gas for space heating purposes) may have lessened the impact of the fuel switching, the overall drop in electricity demand more than offset this. Year-to-year declines in power generation in the East were in the 8-10 percent range during the month.

The non-utility sector continues to show signs of modest recovery, however. The government's index of industrial output rose for the third consecutive month in April (the most recent data), and was up 2.5 percent over the year-ago period. Likewise, the bunker sector appears to have remained resilient. While import and export growth has been weak by standards of recent history, growth has been relatively strong for those commodities comprising the largest share of water-borne tonnage— particularly energy products. The U.S. bunker market has gotten additional support from increasingly competitive prices compared to those in European and Asian markets.

Other Oils

MODEST GROWTH ESTIMATED FOR CONSUMPTION.

Year-to-year increases for "other oils" continued to be relatively strong in May, with a 3.6 percent rise for the month and a roughly 5 percent increase for the year to date. As with total deliveries, weakness in the year-ago period explains a significant portion of the increase, though some underlying growth in demand for "other oils" is also still believed to be present.

This is evident, for example, when the trends in deliveries data are viewed over a shorter term basis. For example, deliveries for most major components of the "other oils" category strengthened between last year's fourth quarter and the first part of this year, after adjusting for normal seasonal patterns. The one notable exception was gasoil for use as petrochemical feedstock, which, due to shifts in relative economics, slipped in favor of other inputs.

SUPPLY [1/]

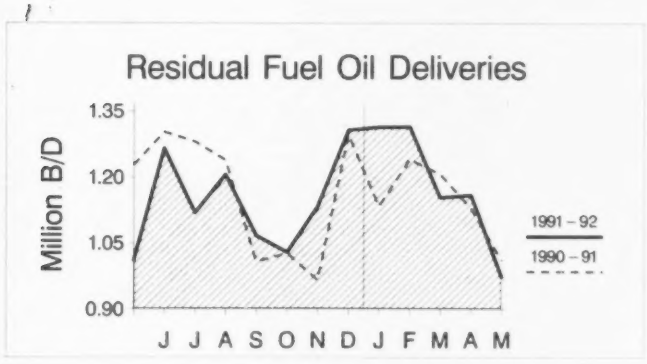
Production

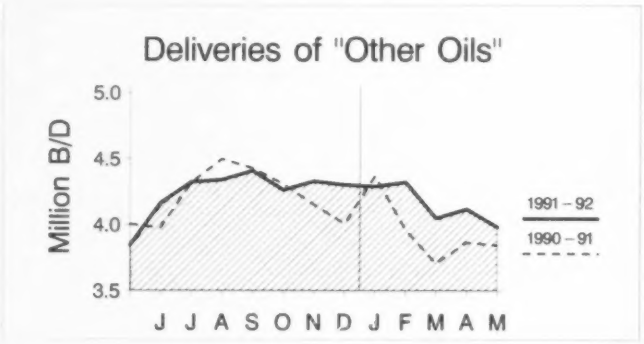
CRUDE FALLS TO A 30 YEAR LOW.

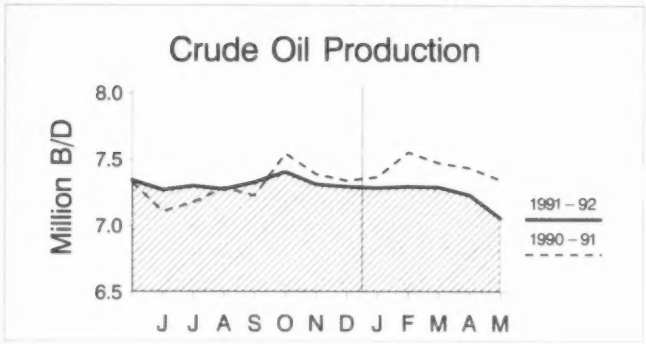
Domestic crude oil production fell in May to its lowest monthly level since 1961. With an 11 percent, 200 thousand B/D drop in Alaskan output, U.S. crude production declined 3.9 percent or nearly 300 thousand B/D from a year ago to 7,055 thousand B/D. Though part of the Alaskan decline was due to scheduled maintenance and other temporary factors, May's U.S. production level, compared with the recent-year peak of just under 9.2 million B/D in February, 1986, nevertheless represented a decline of 23 percent, or over 2 million B/D. Lower 48 production declined as well in May by about 90 thousand B/D from one year earlier.

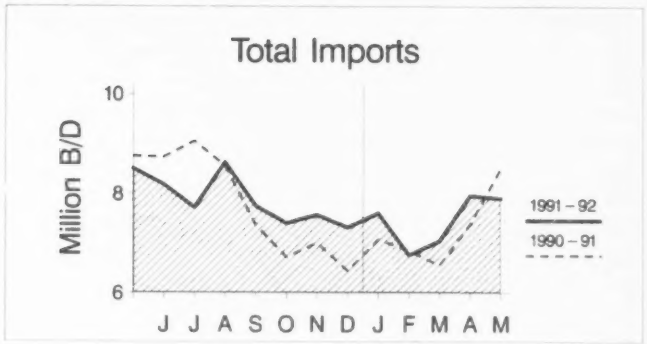
Meanwhile, natural gas liquids (NGLs) production, which constitutes over 16 percent of total domestic petroleum supply, rose slightly in May. While this did little to moderate the decline in domestic supplies overall, with slight year-to-year gains each month in 1992, year-to-date NGL production averaged 1.68 million barrels per day, up 1 percent from the first five months of 1991.

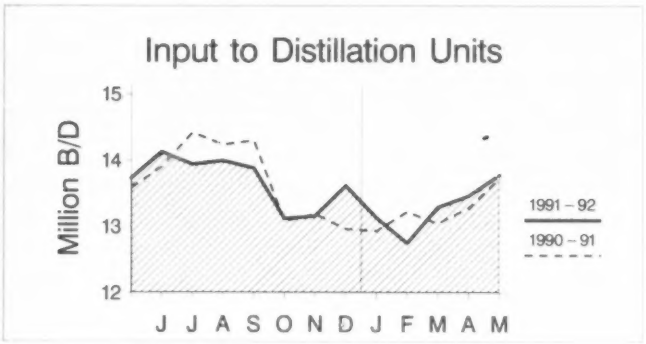
NGL production—that is ethane, propane, butanes and natural gasoline removed from natural gas streams in a field separator or in a gas processing plant—had increased by more than 100 thousand barrels per day in the latter part of 1990 and into 1991 in response to shifting economics. When crude prices rose at the

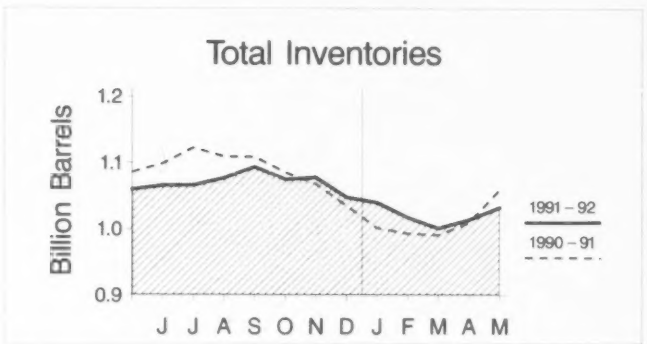












onset of the Persian Gulf War, so did NGL prices, which had been low earlier in 1990. Natural gas prices, however, stayed depressed, and NGLs became more profitable because NGL prices were higher than their extraction costs—including the loss in value of the natural gas due to its lower heat content once the NGLs were removed.

Although markets for liquefied petroleum gases (about two thirds of which are supplied from NGLs) include home heating, gasoline blending, and farm use, petrochemical demand tends to be the most variable because of potential substitution with other petroleum feedstocks. More recent increments in NGL extraction are believed to be the result of continued strength in demand for LPG-derived petrochemical feedstocks and ready availability of natural gas streams. In fact, in 1991, U.S. ethylene production capacity increased 10 percent when three new ethylene plants with a combined capability of running 120,000 B/D of NGL-derived feedstock came on stream on the Gulf Coast.

Imports

IMPORTS DECLINE, BUT TREND IS UP.

Though total imports dropped 7 percent in May over strong year-ago levels, at 7.9 million B/D, they were still at the second-highest level of the past nine months. Crude oil imports, as well, though down about 360 thousand B/D from a year ago, were still up roughly 600 thousand B/D in May from first-quarter levels as refinery runs continued at a brisk pace. Product imports also declined, year to year.

With the growth, however modest, in overall demand and the continued decline in domestic crude oil production, the underlying trend in petroleum imports has necessarily been one of growth, despite the impression that might be given by May's year-to-year decline. For the year to date, though actual imports rose about 180 thousand B/D or 2.5 percent, once adjusted for domestic inventory changes which can temporarily obscure longer term trends in imports, underlying import needs have grown nearly half a million B/D or about 6 percent.

Product imports were down about 240 thousand B/D or about 11 percent from last May. Imports of finished gasoline, though off 130 thousand B/D from last May's surge of over half a million B/D, were still relatively strong at 400 thousand B/D. Imports of kerosine jet fuel, too, have picked up in recent months to a bit over 70 thousand B/D from lows around 30 thousand B/D at the beginning of the year, matching year-ago levels. Distillate imports, however, dropped to 175 thousand B/D, the lowest level since last August.

Refinery Operations

ACTIVITY STILL PICKING UP.

Refinery activity continued to pick up in May from the first quarter's 5-year low. Inputs to distillation units were up fractionally over their levels a year ago, bringing them to their highest level for the month since the late 1970s.

Among major products, jet fuel production was up 3.8 percent from year-ago levels while distillate fuel production was up 0.4 percent. In the case of jet fuel, production was at an all-time high for the month, while distillate production was the highest for any May since 1979. Output of gasoline, in the meantime, fell by nearly one percent from last year, while output of residual fuel oil essentially matched its year-ago level.

Entering May, gasoline stocks were about 10 million barrels higher this year than last, while stocks of jet fuel and distillate were at 6 and 20-plus year lows, respectively, for the month. With apparent consumption of middle distillates growing relative to gasoline, refiners continued to concentrate on production of

the former, both to satisfy current demand and to help replenish inventories.

The increased refinery activity pushed utilization of capacity in operation to about 92.5 percent—unusually high for May, and nearly 2 points higher than a year ago. As a percentage of reported capacity, utilization is estimated at 88.5 percent for the month.

Inventories

CRUDE, PRODUCTS AT BELOW-AVERAGE STOCK LEVELS. Overall, May's data suggested conservatism in holding inventories. Total stocks rose 19 million barrels during May, about 10 million barrels less than the historical average. Despite higher crude oil imports compared with a few months ago, crude stocks ended the month at 346 million barrels—roughly 8 million barrels lower than average for the month, as moderately strong refinery runs drew down crude stocks by 7 million barrels.

Gasoline stocks were essentially unchanged during May, and though ending stocks were up 6 million barrels from a year ago, at 216 million barrels they were 6 million barrels lower than average for the end of May. Distillate stocks, too, rose less than seasonally over the month to 94 million barrels. They ended the month about 9 million barrels below the recent-year average for the month—likely held down in part by unanticipated demand springing from colder-than-normal weather in some regions.

1/ Total supply, i.e., production plus imports adjusted for net stock change is equal to total products supplied from primary storage. Total products supplied from primary storage less exports is equal to total domestic products supplied. Information contained in this report is derived from information published in the API Weekly Bulletin and is based on historical analysis of the industry. All data reflect the most current information available to the API and include all previously published revisions.

2/ Includes lease condensate.

3/ API data do not include crude oil imported for the Strategic Petroleum Reserve (SPR) nor crude oil stocks held in the SPR (according to the U.S. Department of Energy, the SPR held approximately 569 million barrels as of May 31, 1992).

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ESTIMATED UNITED STATES PETROLEUM BALANCE
(Daily Average in Thousands of 42 Gallon barrels)

Products Supplied/Supply From Primary Storage	MAY			YEAR-TO-DATE		
	1992[1]	1991[2]	% Change	1992[3R]	1991[2]	% Change
Products Supplied:						
Total motor gasoline	7,379	7,475	(1.3)	7,155	7,025	1.9
Finished leaded motor gasoline/*	126	280	(55.0)	128	274	(53.3)
Finished unleaded motor gasoline/*	7,253	7,195	0.8	7,027	6,751	4.1
Naphtha-jet	153	191	(19.9)	148	172	(14.0)
Kerosine-jet	1,169	1,123	4.1	1,251	1,260	(0.7)
Distillate fuel oil	2,881	2,735	5.3	3,107	2,986	4.1
Residual fuel oil	972	1,010	(3.8)	1,180	1,141	3.4
All other oils[4]	3,982	3,843	3.6	4,151	3,951	5.1
Reclassified[5]	-219	-279	(21.5)	-243	-240	1.3
Total domestic products supplied	16,317	16,098	1.4	16,749	16,295	2.8
Exports	972	1,149	(15.4)	982	1,090	(9.9)
Total products supplied	17,289	17,247	0.2	17,731	17,385	2.0
Supply:						
Domestic production:						
Crude oil[6]	7,055	7,339	(3.9)	7,230	7,429	(2.7)
Natural gas liquids	1,670	1,647	1.4	1,680	1,659	1.3
Other supply[7]	1,261	1,390	(9.3)	1,288	1,167	10.4
Total domestic supply	9,986	10,376	(3.8)	10,198	10,255	(0.6)
Imports:						
Crude oil, total[8]	6,030	6,387	(5.6)	5,669	5,570	1.8
Canadian	736	752	(2.1)	792	774	2.3
Other	5,294	5,635	(6.1)	4,877	4,796	1.7
Products, total	1,870	2,109	(11.3)	1,784	1,704	4.7
Residual fuel oil	348	420	(17.1)	386	394	(2.0)
Other	1,522	1,689	(9.9)	1,398	1,310	6.7
Total imports	7,900	8,496	(7.0)	7,453	7,274	2.5
Total supply	17,886	18,872	(5.2)	17,651	17,529	0.7
Stock change, all oils	597	1,625	******	-80	144	******
Refinery Operations						
Input to crude oil distillation units	13,774	13,728	0.3	13,286	13,240	0.3
Operable capacity	15,564	15,703	(0.9)	15,604	15,679	(0.5)
Refinery utilization (%)[9]	88.5	87.4	1.3	85.1	84.4	0.8
Crude oil runs	13,616	13,533	0.6	13,087	13,036	0.4

Stocks (millions bbls.)	1992		1991[2]	% Change from	
	May 31[10]	Apr.30[10]	May 31	Previous month	Year Ago
Crude oil[8]	345.6	353.0	358.5	(2.1)	(3.6)
Unfinished oils	104.4	104.9	115.6	(0.5)	(9.7)
Total motor gasoline/**	215.9	216.4	209.5	(0.2)	3.1
Finished leaded motor gasoline/*	3.8	4.0	7.2	(5.0)	(47.2)
Finished unleaded motor gasoline/*	176.2	176.5	164.8	(0.2)	6.9
Naphtha-jet	6.0	5.0	5.7	20.0	5.3
Kerosine-jet	39.0	35.5	41.3	9.9	(5.6)
Distillate fuel oil	94.3	93.3	107.0	1.1	(11.9)
Residual fuel oil	40.7	38.4	45.8	6.0	(11.1)
All other oils	186.3	167.2R	176.1	11.4	5.8
Total all oils	1,032.2	1,013.7R	1,059.5	1.8	(2.6)

/1 Based on API estimated data converted to a monthly basis.
/2 Source: U.S. Department of Energy.
/3 January-March, DOE, April-May, API.
/4 Includes crude losses.
/5 Beginning with January 1981, U.S. Department of Energy began using a new data collection system which encompasses a method to ascertain the amount of product reclassified during the production phase. So that there will be no double counting of these volumes, they are subtracted from the total domestic products supplied.
/6 API estimate; includes lease condensate.
/7 Includes Unaccounted-for crude oil, which will reflect withdrawls from the SPR when they occur, processing gain, field production of other hydrocarbons and alcohol.
/8 Data do not include oil imported for the Strategic Petroleum Reserve (SPR) nor crude oil stocks held in the SPR.
/9 Represents "Input to crude oil distillation units" as a percent of "Operable capacity".
/10 Derived by interpolating API weekly stocks data.
/R Revised.
/* Included in motor gasoline.
/** Includes finished leaded, finished unleaded, and motor gasoline blending components stocks.